



DEPARTMENT OF THE NAVY

COMMANDING OFFICER  
NAVAL AIR MAINTENANCE TRAINING UNIT  
9287 SEVENTH AVE.  
NORFOLK, VIRGINIA 23511-4292

NAMTRAUNORVAINST 5100.5

05 DEC 2000

NAMTRAU NORFOLK INSTRUCTION 5100.5

Subj: RESPIRATORY PROTECTION

Ref: (a) OPNAVINST 5100.23E CH-1 Chapter 15  
(b) COMNAVBASENORVAINST 5100.6D Chapter 17  
(c) NAMTRAU NORFOLK Air-Purifying Respirator Standard Operating Procedures

Encl: (1) Sample Respirator Fit Tester Coordinator Designation Letter  
(2) Respirator Weekly Inspection Form

1. Purpose. To outline procedures for NAMTRAU Norfolk personnel to become a qualified respirator wearer, types of respirators required, inspection, how to properly wear, clean, store, procure and emergency procedures. Outline requirements for personnel to become a command respirator fit test coordinator.

2. Background. The Naval Medical Center Portsmouth has identified work tasks being performed here at NAMTRAU Norfolk that requires the use of a respirator in the industrial hygiene survey. The work tasks include spray painting, spray sealing, sanding, and the use of organic paints and solvents. The nature and location of the hazard were taken into consideration to determine the proper respiratory protection required as indicated on the personal protective equipment (PPE) checklist included in the industrial hygiene survey. Refer to the PPE checklist prior to performing these work tasks. The Naval Station, Norfolk Respirator Protection Program Manager (RPPM) (telephone number 322-2917) should be contacted if there are any questions.

3. Requirements to become a respirator wearer. Navy regulations require each respirator user to be entered into the respirator protection program. This program includes:

a. A pre-assignment medical evaluation followed by periodic medical evaluations to ensure you are physically able to wear a respirator. You must be medically evaluated as per the schedule prior to fit testing and have received respirator training. Periodic medical evaluations to make sure you are physically able to wear a respirator. American National Standards Institute (ANSI) Standard Z88.6 states in section 6 Medical Examination, item 6.1 frequency of examination. Recommended guidelines for frequency would be every 5 years below age 35, every 2 years up to age 45, and annually thereafter. Special evaluations shall

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be performed after prolonged absences from work for medical reasons or whenever a functional disability has been identified.

b. Initial training with fit testing and annual refresher training and fit testing shall be provided to ensure proper fit and face piece-to-face seal. This training will include types of hazards, selection, and use and care of the respirator. Training shall be scheduled through Naval Station, Norfolk, Sewells Point Safety Office, Training Division and RPPM. Schedule employees for this training by calling this office at telephone number 322-2917/-2928. This training will include types of hazards, selection, use, and care of respirators.

c. Personnel will be issued individual respirators based upon employee comfort, size, type required, and model and manufacturer for which the employee has been successfully fit tested.

4. Types of respirators required. The work center is required to use a National Institute of Occupational Safety & Health (NIOSH) or Mine Safety Health Administration (MSHA) or Department of Health And Human Services (DHHS) jointly approved, at least a half-mask, air-purifying respirator with combination organic vapor HEPA cartridges. The cartridge is for protection against harmful organic vapors, dusts, fumes, mists and of chromates and lead based paint particles where concentrations have been determined by the industrial hygiene sampling results. Use of the half mask air-purifying respirator shall not generally be permitted in tasks where the harmful exposures exceed ten times the permissible exposure limit (PEL). Use of the full-face air-purifying respirator shall not generally be permitted in tasks where the harmful exposures exceed ten times the PEL.

a. The wearer must use the specific (manufacturer/model/size) respirator that he/she was fitted for during OSH office respirator training as indicated on the respirator control form and respirator fit card. Respirator wearers are only authorized to use the specific air-purifying cartridge(s) listed on the respirator control form and respirator fit card.

b. If it becomes difficult to breath, or if you smell the solvents or paints you are working with, your cartridges may need to be replaced (always change both cartridges). Leave the contaminated atmosphere to change cartridges or adjust the respirator.

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c. The air-purifying respirator is not for use in atmospheres immediately dangerous to life and health (IDLH) containing less than 19.5% or more than 23.5% oxygen. Wearing a respirator shall not exceed a total of 4.4 hours a day wearing a respirator. This is total accumulated time per day.

5. Inspection of the respirator. Course managers/supervisors/RPPM or class instructor shall inspect each respirator used/stored (student/spare/instructor) for their course weekly utilizing enclosure (2). Annotate on the weekly respirator inspection form, instructor/student name or spare respirator number, type and size, any discrepancies found, and any corrective action taken. Document the inspection, any discrepancies found, corrective action taken.

a. Respirators shall be inspected prior to and after each use. Report any defects to the (NAMTRAU) Respirator POC or supervisor in charge of the respirator program or to your supervisor as soon as possible. Respirators are normally kept in building SP-383 Paint & Finish class room in the respirator locker. The respirators are stored in their assigned storage location(s). Respirators are logged out when in use and when personnel are detached and leave with their respirators. Each employee is responsible for cleaning and sanitizing his or her assigned respirator(s). Employees may review the SOP section on inspection, cleaning, stowage and disinfecting for proper procedures. The Respirator Protection Program Manager (RPPM) from Sewells Point Safety Office shall conduct an annual audit of respirator use at this work site.

b. User Inspection: The following will be inspected prior to wearing and after each use of the respirator:

(1) Headband: Ensure headband straps (and/or cradle assembly straps) still have their elasticity. Inspect for breaks or tears in the straps or tears in the material and make sure all clips, fasteners and adjusters are in place and working properly. **Never** tie loose straps to ensure fit.

(2) Inhalation and Exhalation Valves: Check for cracks, tears, distortion, dirt, or buildup of materials between valve and valve seat.

(3) Cartridge Holders: Check to make sure gaskets are in place and check for cracked or damaged threads.

(4) Facepiece: Check for dirt, cracks, tears, holes, and distortion. Make sure the material is flexible, not stiff.

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(5) Cartridges: Make sure the cartridges are clean and inspect for dents, scratches, corrosion, or any other damage. DO NOT USE a damaged cartridge, contact supervisor or respirator POC for replacement cartridges.

(6) Manufacturers: Never mix parts from different manufacturers. Repairs, purchasing and parts replacements are to be approved by the RPPM.

(Note: Contact your supervisor and/or unit respirator POC to correct any deficiencies requiring replacement parts, including replacement cartridges.)

6. How to don a respirator. The following is step-by-step procedures to don a respirator:

a. Fit facepiece over bridge of nose making sure that you are able to breathe through your nose, then swing bottom of facepiece into contact with your chin. Position and fasten headbands around the head with the longest straps above the ears and the shortest straps below the ears and adjusting the straps for comfort. (If the respirator is equipped with a cradle strap assembly: pull the headband over your head so the cradle straddles the crown of your head). Fitting the facepiece too tightly or too loosely can create a break in the seal.

b. When the facepiece is properly seated perform the following **User Seal Checks** to ensure an adequate seal is achieved each time the respirator is put on.

(1) Positive Pressure Test: Lightly place palm of hand over the exhalation valve cover and gently exhale. A slight positive pressure should build up inside the mask. If any leakage is detected around the face seal, readjust the head straps and repeat the test.

(2) Negative Pressure Test: Lightly cover cartridges with paper/plastic wrap or palm of your hand and inhale gently holding breath for ten seconds. The facepiece should collapse slightly, if it doesn't readjust the straps and repeat the test.

c. Respirators are not to be worn when conditions prevent a good face seal such as facial hair, stubble and beards, sideburns, skullcaps and temple bars on glasses that project under the facepiece.

d. Wearing contact lenses are not authorized when respirators are used.

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e. Male personnel with no shave chits are not eligible to be in the respirator program and shall not use any tight fitting mask respirator.

7. Cartridge replacement. Discard both cartridges at same time after eight hours use or sooner if breakthrough occurs or if cartridge is damaged or are difficult to breathe through.

8. Cleaning and storage.. The following should be done after each use to maintain the respirator in ready to use sanitary condition. When cleaning respirators always wear protective latex gloves, gowns or coveralls and eye protection chemical goggles and a face shield. These PPEs are necessary to ensure the cleaning/disinfecting solution and rinse water does not injure the individual by skin and/or eye contact.

a. Use warm mild detergent (soap) and warm water solution, not to exceed 120°F. Use the two- (2) bucket method (i.e. one-bucket designated and marked for soapy wash water solution and another for rinse water) when utility sinks are not available. Or use the manufacturer's cleaning disinfecting solution as per the manufacturer's instructions. (Note: use only the manufacturer's cleaners for your specific brand respirator - not another manufacturer's/brand cleaner/disinfectant).

b. Do not use cleaning solvents or abrasive means to remove paints from the respirator facepiece.

c. Immerse all parts, excluding straps, in the soapy solution.

d. Remove all dirt, grease and grime - use sponge or brush. Rinse thoroughly in warm water, not to exceed 120°F, to remove all soap residues.

e. Wipe down straps and cradle with damp soapy sponge or cloth and wipe again with sponge/cloth soaked in rinse water. If straps are extremely dirty they may be soaked and washed in the soapy wash water solution and later rinsed thoroughly.

f. Allow all parts to thoroughly dry in a clean environment before storing in the sealed plastic bag.

g. If the respirator is used by more than one person then it must be sanitized after each use in a mixture of one part unscented bleach to nine parts water.

h. Store respirator in a metal upright locker to protect it from contaminants. Store the cartridges with the respirator but in a separate zip lock bag.

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i. Each storage locker shall have an inventory posted on the front of it, to indicate the type and quantity respirators held in it.

9. Respirator procurement. Respirator procurement shall be accomplished through normal supply channels. All available information such as quantity and spare parts required will be provided to Naval Station, Norfolk respiratory protection program manager for approval.

10. Emergency/rescue procedures. If while wearing respirator the cartridge(s) become clogged and breathing is difficult or you begin to smell the chemicals, paint or solvent, **do not remove** the respirator from your face; walk to an area free of contaminant - preferably fresh air - then remove the respirator. Contact your supervisor for new cartridges, install new cartridges and return to the work task. In the event of a greater emergency such as heat stroke, move the victim to fresh air before removing the respirator from his/her face and call for medical assistance, 444-3333.

11. Command respirator refit tester coordinator. Perform fit tests on students reporting for NAMTRAU classes without a respirator or an unserviceable respirator and perform annual respirator refitting for NAMTRAU Norfolk staff personnel.

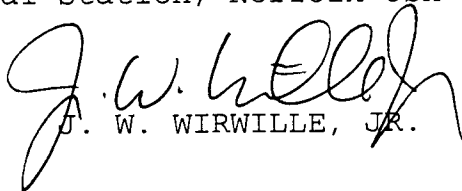
12. Requirements to become a command respirator refit tester coordinator. The following requirements must be accomplished prior to designation as a command respirator refit tester:

a. Be respirator qualified and be initially fit tested and trained by Naval Station, Norfolk OSH personnel.

b. Attend a refit tester training at the Naval Station, Norfolk OSH office.

c. Be designated in writing by the Commanding Officer with copy forwarded to the Naval Station, Norfolk respiratory protection program manager.

13. This instruction must be posted in each space that requires the use of a respirator. Any unusual conditions, conflicts or observed violations shall be reported to the RPPM/course/manager/supervisor/instructor and Naval Station, Norfolk OSH office, 322-2917.

  
J. W. WIRWILLE, JR.

Distribution:  
All Departments/MTUs

05 SEP 2000

SAMPLE RESPIRATOR FIT TESTER COORDINATOR DESIGNATION LETTER

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From: Commanding Officer, Naval Air Maintenance Training Unit,  
Norfolk  
To: Commander, Naval Base, Norfolk (N-34)  
Subj: COMMAND RESPIRATORY PROGRAM FIT TEST COORDINATOR  
Ref: (a) OPNAVINST 5100.23 Series  
(b) COMNAVBASENORVAINST 5100.6 Series

1. Per reference (a), request (Rate/Name), USN, (SSN), (804) 44X-XXXX/XXXX, be approved as NAMTRAU Norfolk's Respiratory Program Fit Test Coordinator. He will be responsible for compliance with reference (b) to include performing fit testing.
2. Your continued assistance in providing guidance as required is appreciated.

J. W. WIRWILLE, JR.

Copy to:  
(Rate/Name)

Enclosure (1)

NAMTRAUNORVAINST 5100.5

05 MAR 2000

## Weekly Respirator Inspection Form

Date: \_\_\_\_\_ Course Title: \_\_\_\_\_ CIN: \_\_\_\_\_ Class #: \_\_\_\_\_ Inspector: \_\_\_\_\_

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Enclosure (2)